

# The Water Technology Cluster Milwaukee, WI

Water Resilient Cities  
Cleveland State University

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# Conference Theme 1C

## Adaptive Capacity; Learning; Collaboration

- **Build on existing strengths**
  - **Water technologies: Brewing; Tanning; Food Processing**
- **Learn what you have w/different perspective**
  - **Discover these: e.g., water technologies 2007**
- **Work with many others to build**
  - **Industry led PPP: firms, universities, gov't, NPs**
- **Result: The Water Council and Econ. Dev.**

# Water-Tech Cluster Definition

- A geographical concentration of water technology companies that create and produce solutions to water quality and quantity problems
- It is **NOT** large water users; it is solution providers

## **Further definition of a water-tech cluster**

- **An existing core of water technology companies**
- **Academic partners for research & talent development**
- **A talent pipeline: K to gray**
- **Innovative users, e.g., water and wastewater utilities**
- **Supportive non-profits that push environmental goals**
- **Large as well as small water tech companies**
- **Entrepreneurs developing new technologies**
- **Support from the larger community**

# Global Water Center

- The Physical Hub



# Water Tech Companies

- **After eight years of refining, we now include companies that can be found in 34 different NAICS codes; categorized in 15 different solution categories.**
- **List available**

# Build Brand: World Water Hub

- **Brand Unknown 2008**
- **Organized The Water Council (TWC) formally 2009**
- **“UN Global Compact City: Water Solutions” 2009**
- **First paid Director 2011**
- **65 National Media stories on TWC in 2015 (*Economist, Chicago Tribune, Detroit Free Press, etc.*)**
- **47 International Delegations visited in 2015**
- **24 TWC presentations at Global water conferences 2015**

# Grow Existing Companies

- **Make connections – image and leads**
- **Build Tech: Establish I/UCRC for joint research**
  - **NSF Center: \$6M in 5 yrs. 10 licenses, 4 pat. Aps, 28 PIs, 67 students – 5 hired**
- **Offer Services: e.g., Global Water Port**  
**Powerful online tool**
- **Share info on new technologies**



# Attract Companies

- **MKE place to be if in water, like SV for Tech**
- **Large: e.g., Zurn Industries – new \$14M HQ**
- **Small: BREW new starts competition**
  - **Applicants from many states and countries**
  - **Winners locate in MKE**

# Grow New Water-Tech Companies

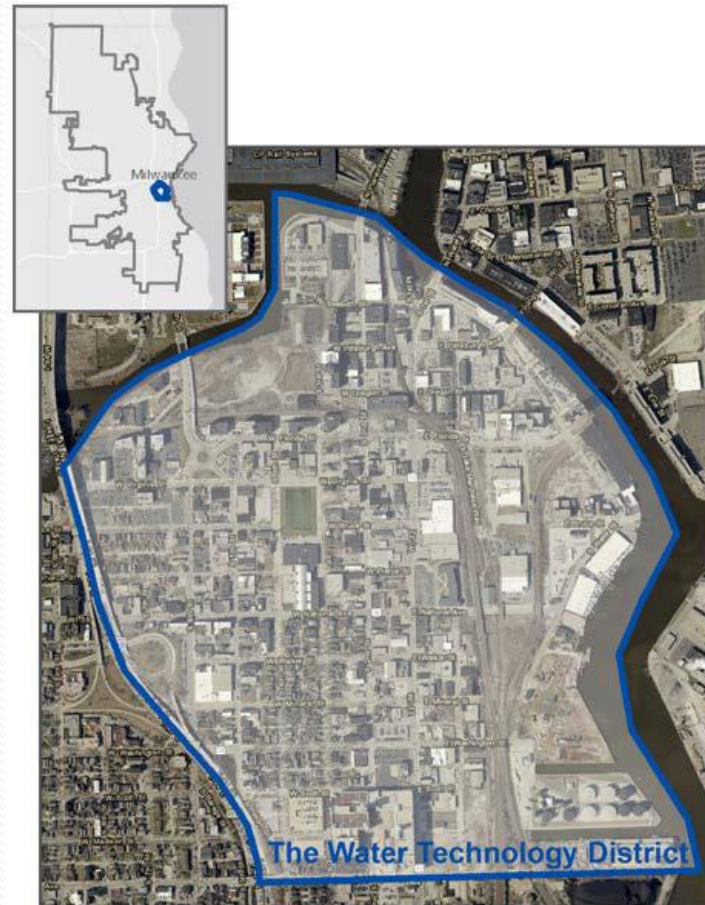
## Start or Move for Water Ecosystem

- **BREW – 3 classes to date; 17 new starts**
  - **Goal – 75 new starts over next 5 years**
- **Classes: 16 programs in 2015; 50 businesses**
- **Office Space: 17 start-ups in GWC**
- **Seed Fund: \$5M for early stage cos. over 5 years**

# Local Economic Development

- **New real estate investment:**
  - \$211.6M in MKE Water-Tech District 2012-15
- **Company investment: Dow Chemical /OxyMem**
  - 4/13/16 Membrane Aerated Biofilm Reactor technology
- **Awards**
  - SSTI Excellence in Tech-based Economic Development – National Award – Improving Competitiveness for Existing Industry
  - WEDC: Advancing's Wisconsin's Position in the World Marketplace

# MKE Water Technology District



# Is Milwaukee Unique?

- **Not seen another like it in the US**
- **Searched elsewhere: small concentrations of particular solutions, e.g. irrigation in Fresno, CA, but not organized; innovation in Israel; but ...**
- **Detailed look in NE Illinois and NW Indiana**
  - **Not there; 4,000 examined; 200 found, mostly engineering; proof that Milwaukee is unique, a true water tech cluster**
- **History of water-tech innovation to meet needs**

# Showcase for Green Infrastructure: Reed Street Yards

